

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A separator, comprising a flexible nonwoven having a porous inorganic coating on and in said nonwoven, and wherein the material of said nonwoven ~~being~~ is selected from non-woven, nonelectroconductive polymeric fibers, ~~characterized by and wherein~~ said nonwoven ~~having~~ has a thickness of less than 30 μm , a porosity of more than 50% and a pore radius distribution, in which at least 50% of the pores have a pore radius from 75 to 150 μm .

Claim 2 (Currently Amended): The separator of claim 1, ~~characterized by~~ wherein said separator ~~being~~ is less than 35 μm in thickness.

Claim 3 (Currently Amended): The separator of claim 1 ~~or 2~~, wherein ~~characterized by~~ said polymeric fibers are ~~being~~ selected from fibers of polyacrylonitrile, polyester, ~~and/or~~ polyolefin or mixtures thereof.

Claim 4 (Currently Amended): The separator of claim 1 ~~at least one of claims 1 to 3~~, ~~characterized by~~ wherein said polymeric fibers are ~~being~~ from 0.1 to 10 μm in diameter.

Claim 5 (Currently Amended): The separator of claim 1 ~~at least one of claims 1 to 4~~, wherein ~~characterized by~~ said flexible nonwoven ~~having~~ has a base weight of less than 20 g/m^2 .

Claim 6 (Currently Amended): The separator of claim 1 ~~at least one of claims 1 to 5~~, wherein ~~characterized by~~ said nonwoven is ~~being~~ from 5 to 30 μm in thickness.

Claim 7 (Currently Amended): The separator of claim 1 ~~any of claims 1 to 6~~, characterized by wherein said porous inorganic coating, present on and in said nonwoven, comprises ~~comprising~~ oxide particles of the elements Al, Si and/or Zr having an average particle size from 0.5 to 7 μm .

Claim 8 (Currently Amended): The separator of claim 1 ~~any of claims 1 to 7~~, characterized by wherein said porous inorganic coating, present on and in said nonwoven, comprises ~~comprising~~ aluminum oxide particles having an average particle size from 1 to 4 μm , which are adhered by an oxide of the elements Zr or Si.

Claim 9 (Currently Amended): The separator of claim 1 ~~at least one of claims 1 to 8~~, wherein ~~characterized by~~ said separator is being from 30 to 80% in porosity.

Claim 10 (Currently Amended): The separator of claim 1 ~~at least one of claims 1 to 9~~, wherein ~~characterized by~~ said separator has ~~having~~ a breaking strength of more than 1 N/cm.

Claim 11 (Currently Amended): The separator of claim 1 ~~at least one of claims 1 to 10~~, wherein ~~characterized by~~ said separator is being bendable around a radius down to 100 mm without damage.

Claim 12 (Currently Amended): The separator of claim 1 ~~at least one of claims 1 to 11~~, wherein ~~characterized by~~ said separator being is bendable around a radius down to 1 mm without damage.

Claim 13 (Currently Amended): A process for producing the a separator as claimed in claim 1 ~~at least one of claims 1 to 12, said process comprising applying to the nonwoven which comprises providing a flexible nonwoven which has a thickness of less than 30 μm , a porosity of more than 50% and a pore radius distribution in which 50% of the pores have a pore radius from 75 to 150 μm with a porous inorganic coating on and in said flexible nonwoven by applying to said nonwoven a suspension comprising oxide particles and at least one sol, and heating one or more times to solidify said suspension on and in said nonwoven~~[[,]] ~~the material of said nonwoven being selected from non-woven nonelectroconductive polymeric fibers.~~

Claim 14 (Currently Amended): The process of claim 13, wherein said suspension comprises oxide particles, having an average particle diameter from 0.5 to 7 μm , of the elements Al, Zr and/or Si, and at least one sol.

Claim 15 (Currently Amended): The process of claim 13 ~~or 14~~, wherein said suspension is brought onto and into said nonwoven ~~substrate~~ by printing on, pressing on, pressing in, rolling on, knife coating on, spread coating on, dipping, spraying or pouring on.

Claim 16 (Currently Amended): The process of claim 13 ~~at least one of claims 13 to 15~~, wherein said polymeric fibers are selected from the fibers of polyacrylonitrile, polyester or polyolefin.

Claim 17 (Currently Amended): The process of claim 13 ~~at least one of claims 13 to 16~~, wherein said suspension comprises at least one sol of the elements Al, Zr and/or Si, and is prepared by suspending oxide particles in at least one of these sols.

Claim 18 (Currently Amended): The process of claim 17, wherein said sols are obtained by hydrolyzing at least one compound of the elements Al, Zr and/or Si, with water or an acid or a combination thereof.

Claim 19 (Currently Amended): The process of claim 18, wherein said hydrolyzing is effected on at least one alkoxide compound of the elements Zr, Al and/or Si, or at least one nitrate, carbonate or halide selected from the compounds of the elements Zr, Al, ~~and/or Si~~ or mixtures thereof.

Claim 20 (Currently Amended): The process of claim 13 ~~at least one of claims 13 to 19~~, wherein said metal oxide particles are aluminum oxide particles having an average particle size from 0.5 to 7 μm .

Claim 21 (Currently Amended): The process of claim 17 ~~at least one of claims 17 to 20~~, wherein the mass fraction of said suspended metal oxide particles is from 1 to 10 times that of the sol used.

Claim 22 (Currently Amended): The process of claim 13 ~~at least one of claims 13 to 21~~, wherein said suspension, present on and in said nonwoven, is solidified by heating to 50-350°C.

Claim 23 (Currently Amended): The process of claim 22, wherein said heating is effected at ~~from~~ 110 to 280°C for ~~from~~ 0.5 to 10 minutes.

Claim 24 (Currently Amended): ~~The use of a~~ A method of producing a battery,
comprising, inserting the separator as claimed in claim 1 ~~at least one of claims 1 to 12 as a~~
~~separator in lithium batteries~~ into a battery cell.

Claim 25 (Currently Amended): A battery comprising a the separator as claimed in
claim 1, and one or more components ~~at least one of claims 1 to 12.~~